

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start		Rating **	A	Issue No.	<b>10</b>
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_ST0010_01_s_2013_10				
Comment Code					
Inspector Comment					
The LMA has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	<b>11</b>
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_ST0010_01_s_2013_11				
Comment Code					
Inspector Comment					
The LMA has flood fight supplies and equipment.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start	0.56	Rating **	U	Issue No.	18
LM End	0.56	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.119985 °	39.119985 °
				-121.762600 °	-121.762600 °
DWR ID	DWR_ST0010_01_s _ 2017_18				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Repair the erosion along the water side toe.					

Photo 1 of 1 : SP\_2017\_ST0010\_42\_18\_20170413\_00030.jpg



View of the erosion along the waterside toe caused by a tree that fell into the water.

LM Start	1.75	Rating **	M	Issue No.	7
LM End	2.39	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			39.133887 °	39.141757 °
				-121.749526 °	-121.742939 °
DWR ID	DWR_ST0010_01_s _ 2016_7				
Comment Code					
Inspector Comment					
2011 - Whole bank is starting to unravel, with failure from poor soils. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: WAD_2-1_L]					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start	1.85	Rating **	U	Issue No.	107
LM End	1.85	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.135110 °	39.135110 °
				-121.748230 °	-121.748230 °
DWR ID	DWR_ST0010_01_f_2013_107				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Repair the erosion under the abandoned pump.					

Photo 1 of 3 : SP\_2017\_ST0010\_42\_107\_20170315\_00014.jpg



View of the erosion along both sides of the abandoned pump.

LM Start	<b>1.85</b>	Rating **	U	Issue No.	<b>107 (cont)</b>
LM End	<b>1.85</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : SP\_2017\_ST0010\_42\_107\_20170315\_00015.jpg



View of the erosion along both sides of the abandoned pump.

LM Start	<b>1.85</b>	Rating **	U	Issue No.	<b>107 (cont)</b>
LM End	<b>1.85</b>	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP\_2017\_ST0010\_42\_107\_20170413\_00029.jpg



View of erosion along both sides of the abandoned pipe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start	1.85	Rating **	M	Issue No.	106
LM End	1.85	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.135110 °	39.135110 °
				-121.748229 °	-121.748229 °
DWR ID	DWR_ST0010_01_f_2013_106				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_ST0010\_42\_106\_20170315\_00013.jpg



View of the rodent holes under the irrigation pipe.

LM Start	2.43	Rating **	M	Issue No.	6
LM End	3.30	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			39.142235 °	39.153095 °
				-121.742609 °	-121.734390 °
DWR ID	DWR_ST0010_01_f_2015_6				
Comment Code					
Inspector Comment					
2010 - Over steepened levees, some slumping, reach-wide problem.					
2011 - Still a reach-wide problem. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: WAD_2-4_L]					

Photo 1 of 4 : SP\_2017\_ST0010\_42\_6\_20170315\_00006.jpg



View of the erosion along the waterside toe.

LM Start	<b>2.43</b>	Rating **	M	Issue No.	<b>6 (cont)</b>
LM End	<b>3.30</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : SP\_2017\_ST0010\_42\_6\_20170315\_00007.jpg



View of the erosion along the waterside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	--	--	---	--	---	--

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start	2.43	Rating **	M	Issue No.	6 (cont)	
LM End	3.30	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2015 USACE Erosion Survey, DRAFT			39.142235 °	39.153095 °	
				-121.742609 °	-121.734390 °	
DWR ID	DWR_ST0010_01_f_2015_6					
Comment Code						
Inspector Comment						
2010 - Over steepened levees, some slumping, reach-wide problem. 2011 - Still a reach-wide problem. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: WAD_2-4_L]						

Photo 3 of 4 : SP\_2017\_ST0010\_42\_6\_20170315\_00008.jpg



View of the erosion along the waterside toe.

LM Start	<b>2.43</b>	Rating **	M	Issue No.	<b>6 (cont)</b>
LM End	<b>3.30</b>	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : SP\_2017\_ST0010\_42\_6\_20170315\_00009.jpg



View of the erosion along the waterside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start	3.04	Rating **	M	Issue No.	111
LM End	3.04	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.149549 °	39.149549 °
				-121.736408 °	-121.736408 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51500  
DS\_ID:17065  
EP\_NO: 7209  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 4/10/2017 Ws pipe end is in good condition. LS pipe end is still deformed and vegetated. (DWR Sutter Yard-AFreitag)10/12/2016 LS inlet is still deformed and being overgrown by vegetation.(DWR Sutter Yard - aFreitag)4/19/2016 Crossing appears to be in good condition.5/12/2015 LS inlet still deformed a little but does not affect the crossing function.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Pipe intake on LS appears to be bent and damaged but that does not appear to be affecting water flow or channel bank.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe (permit records indicate 30-inch USACE O&M pipe replaced with new 30-inch pipe) through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. (original O&M manual crossing was replaced under Permit No. 7209, 1970 - Department of Water Resources) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 160+25)].  
FS Date: 4/12/2017 9:39:10 AM

LM Start	<b>3.04</b>	Rating **	M	Issue No.	<b>111 (cont)</b>
LM End	<b>3.04</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51500\_64718.jpg



36-inch pipe with flapgate on WS slope.

Photo 2 of 3 : UCIP\_SP\_2017\_51500\_64717.jpg



Inlet in weeds on LS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	---	--	---	--



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start	3.04	Rating **	M	Issue No.	111 (cont)
LM End	3.04	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.149549 °	39.149549 °
				-121.736408 °	-121.736408 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51500  
DS\_ID:17065  
EP\_NO: 7209  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 4/10/2017 Ws pipe end is in good condition. LS pipe end is still deformed and vegetated. (DWR Sutter Yard-AFreitag)10/12/2016 LS inlet is still deformed and being overgrown by vegetation.(DWR Sutter Yard - aFreitag)4/19/2016 Crossing appears to be in good condition.5/12/2015 LS inlet still deformed a little but does not affect the crossing function.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Pipe intake on LS appears to be bent and damaged but that does not appear to be affecting water flow or channel bank.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe (permit records indicate 30-inch USACE O&M pipe replaced with new 30-inch pipe) through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. (original O&M manual crossing was replaced under Permit No. 7209, 1970 - Department of Water Resources) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 160+25)].  
FS Date: 4/12/2017 9:39:10 AM

Photo 3 of 3 : UCIP\_SP\_2017\_51500\_64716.jpg



Pipe inlet heavily shielded by vegetation.

LM Start	3.53	Rating **	M	Issue No.	3
LM End	3.56	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.156225 °	39.156639 °
				-121.732930 °	-121.732755 °
DWR ID	DWR ST0010 01 s 2012 3				

**Comment Code**

E1 : Note and monitor erosion site.

**Inspector Comment**

Monitor the erosion along the waterside toe.

Photo 1 of 1 : SP\_2017\_ST0010\_42\_3\_20170315\_00001.jpg



View of the erosion along the waterside toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start	3.65	Rating **	M	Issue No.	4
LM End	3.65	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.157861 °	39.157861 °
				-121.732238 °	-121.732238 °
DWR ID	DWR_ST0010_01_s_2012_4				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Monitor the erosion along the waterside toe.					

Photo 1 of 2 : SP\_2017\_ST0010\_42\_4\_20170315\_00002.jpg



View of the erosion along the waterside toe of the levee.

LM Start	<b>3.65</b>	Rating **	M	Issue No.	<b>4 (cont)</b>
LM End	<b>3.65</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP\_2017\_ST0010\_42\_4\_20170315\_00003.jpg



View of the erosion along the waterside toe.

LM Start	3.84	Rating **	M	Issue No.	17
LM End	3.85	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.160442 °	39.160517 °
				-121.731067 °	-121.731137 °
DWR ID	DWR_ST0010_01_f_2014_17				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Monitor the erosion along the waterside toe.					

Photo 1 of 1 : SP\_2017\_ST0010\_42\_17\_20170315\_00010.jpg



View of the erosion along the waterside toe.

**\* Location**

LS : Land Side N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable N : Not Inspected/Rated  
M : Minimally Acceptable C : Corrected  
U : Unacceptable A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.63	04/11/2017 04/11/2017	Bob Duffey

LM Start	4.23	Rating **	M	Issue No.	5
LM End	4.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.165845 °	39.165845 °
				-121.728877 °	-121.728877 °
DWR ID	DWR_ST0010_01_s_2012_5				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Monitor the erosion along the waterside toe.					

Photo 1 of 2 : SP\_2017\_ST0010\_42\_5\_20170315\_00004.jpg



View of the erosion along the waterside toe.

LM Start	<b>4.23</b>	Rating **	M	Issue No.	<b>5 (cont)</b>
LM End	<b>4.23</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP\_2017\_ST0010\_42\_5\_20170315\_00005.jpg



View of the erosion along the waterside toe.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable  
N : Not Inspected/Rated  
C : Corrected  
A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	1.16	Rating **	U	Issue No.	19
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.127527 °	39.127527 °
				-121.756493 °	-121.756493 °
DWR ID	DWR_ST0010_02_f_2016_19				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Repair the rodent holes along the waterside slope.					

Photo 1 of 2 : SP\_2017\_ST0010\_43\_19\_20170315\_00014.jpg



View of the rodent holes along the waterside slope.

LM Start	<b>1.16</b>	Rating **	U	Issue No.	<b>19 (cont)</b>
LM End	<b>1.16</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP\_2017\_ST0010\_43\_19\_20170413\_00035.jpg



View of the rodent holes along the waterside slope.

LM Start	1.17	Rating **	C	Issue No.	3
LM End	1.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.127648 °	39.127648 °
				-121.756345 °	-121.756345 °
DWR ID	DWR_ST0010_02_s_2012_3				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
The landside slope was repaired.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	1.17	Rating **	M	Issue No.	23
LM End	1.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.127727 °	39.127727 °
				-121.756308 °	-121.756308 °
DWR ID	DWR_ST0010_02_s_2017_23				
Comment Code					
GA : Garbage					
Inspector Comment					
Remove the garbage from the waterside slope.					

Photo 1 of 1 : SP\_2017\_ST0010\_43\_23\_20170413\_00037.jpg



View of the garbage along the waterside slope.

LM Start	1.68	Rating **	M	Issue No.	24
LM End	1.68	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.133602 °	39.133602 °
				-121.750545 °	-121.750545 °
DWR ID	DWR_ST0010_02_s_2017_24				
Comment Code					
PR : Prunings					
Inspector Comment					
Remove the prunings from the waterside toe.					

Photo 1 of 1 : SP\_2017\_ST0010\_43\_24\_20170413\_00038.jpg



View of the prunings along the waterside toe.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	1.74	Rating **	M	Issue No.	10
LM End	2.37	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			39.134064 °	39.141814 °
				-121.749781 °	-121.743260 °
DWR ID	DWR_ST0010_02_s_2016_10				
Comment Code					
Inspector Comment					
2011 - Whole bank is starting to unravel, with failure from poor soils. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: WAD_2-1_R]					

No Photos

LM Start	1.75	Rating **	M	Issue No.	20
LM End	1.75	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.134378 °	39.134378 °
				-121.749803 °	-121.749803 °
DWR ID	DWR_ST0010_02_f_2016_20				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Ramp is causing depression in the levee slope.					

Photo 1 of 1 : SP\_2017\_ST0010\_43\_20\_20170315\_00015.jpg



View the ramp encroaching into the levee.

LM Start	1.76	Rating **	M	Issue No.	11
LM End	1.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.134490 °	39.134490 °
				-121.749716 °	-121.749716 °
DWR ID	DWR_ST0010_02_f_2012_11				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Repair the rodent hole.					

Photo 1 of 2 : SP\_2017\_ST0010\_43\_11\_20170315\_00012.jpg



View of the rodent holes above the irrigation pipe.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	1.76	Rating **	M	Issue No.	11 (cont)	
LM End	1.76	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			39.134490 °		39.134490 °
				-121.749716 °		-121.749716 °
DWR ID	DWR_ST0010_02_f_2012_11					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
Repair the rodent hole.						

Photo 2 of 2 : SP\_2017\_ST0010\_43\_11\_20170315\_00013.jpg



View of the rodent hole above the irrigation pipe.

LM Start	2.41	Rating **	M	Issue No.	8
LM End	3.28	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			39.142254 °	39.153150 °
				-121.742847 °	-121.734611 °
DWR ID	DWR_ST0010_02_s_2016_8				
Comment Code					
Inspector Comment					
2010 - Over steepened levees, some slumping, reach-wide problem. 2011 - Still a reach-wide problem. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: WAD_2-4_R]					

Photo 1 of 2 : SP\_2017\_ST0010\_43\_8\_20170315\_00008.jpg



View of erosion along the waterside toe.

LM Start	<b>2.41</b>	Rating **	M	Issue No.	<b>8 (cont)</b>
LM End	<b>3.28</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP\_2017\_ST0010\_43\_8\_20170315\_00009.jpg



View of the erosion along the landside toe.

* Location LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
---	--	---	--	---	--	--	--



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	2.95	Rating **	M	Issue No.	21
LM End	2.95	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.148938 °	39.148938 °
				-121.737620 °	-121.737620 °
DWR ID	DWR_ST0010_02_f_2016_21				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Ramp is causing depression in the levee slope.					

Photo 1 of 1 : SP\_2017\_ST0010\_43\_21\_20170315\_00016.jpg



View the ramp encroaching into the levee.

LM Start	3.00	Rating **	M	Issue No.	28
LM End	3.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.149561 °	39.149561 °
				-121.737080 °	-121.737080 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51515 DS_ID:17077 EP_NO: 7209 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 4/10/2017 Tree still present and a problem at the WS pipe outlet. LS inlet is still vegetated. (DWR Sutter Yard-AFreitag)10/12/2016 Tree at the WS pipe end is still an issue and needs to be cut away. LS inlet is also being overgrown with vegetation.(DWR Sutter Yard - afreitag)4/19/2016 Tree at WS pipe end needs to be trimmed back and/or removed. 5/12/2015 Tree growing near WS pipe end is getting too big and will affect the crossing. It needs to be cut back or removed.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe (permit records indicate 30-inch pipe O&M pipe replaced with new 30-inch pipe) through the levee, 14 feet below the crown. Flap gate located on the waterside (WS) end. (original O&M manual crossing was replaced under Permit No. 7209, 1970 - Department of Water Resources) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 158+35)]. FS Date: 4/12/2017 10:16:27 AM					

Photo 1 of 3 : UCIP\_SP\_2017\_51515\_64744.jpg



Bush camouflaging outlet of pipe on WS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	3.00	Rating **	M	Issue No.	28 (cont)
LM End	3.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.149561 °	39.149561 °
				-121.737080 °	-121.737080 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51515  
DS\_ID:17077  
EP\_NO: 7209  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 4/10/2017 Tree still present and a problem at the WS pipe outlet. LS inlet is still vegetated. (DWR Sutter Yard-AFreitag)10/12/2016 Tree at the WS pipe end is still an issue and needs to be cut away. LS inlet is also being overgrown with vegetation.(DWR Sutter Yard - afreitag)4/19/2016 Tree at WS pipe end needs to be trimmed back and/or removed. 5/12/2015 Tree growing near WS pipe end is getting too big and will affect the crossing. It needs to be cut back or removed.11/18/2014 Same as last inspection.5/13/2014 Same as last inspection.10/29/2013 Same as last inspection.5/16/2013 Same as last inspection.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe (permit records indicate 30-inch pipe O&M pipe replaced with new 30-inch pipe) through the levee, 14 feet below the crown. Flap gate located on the waterside (WS) end. (original O&M manual crossing was replaced under Permit No. 7209, 1970 - Department of Water Resources) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 135, May 1953, (Station 158+35)].  
FS Date: 4/12/2017 10:16:27 AM

LM Start	<b>3.00</b>	Rating **	M	Issue No.	<b>28 (cont)</b>
LM End	<b>3.00</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : UCIP\_SP\_2017\_51515\_64743.jpg



Heavy vegetation at LS inlet at channel.

Photo 3 of 3 : UCIP\_SP\_2017\_51515\_64742.jpg



Pipe and flap gate at WS outlet.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	3.42	Rating **	M	Issue No.	4
LM End	3.42	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.155057 °	39.155057 °
				-121.733985 °	-121.733985 °
DWR ID	DWR_ST0010_02_s_2012_4				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Monitor the erosion at the waterside toe.					

Photo 1 of 2 : SP\_2017\_ST0010\_43\_4\_20170315\_00002.jpg



View of the erosion at the waterside toe.

LM Start	<b>3.42</b>	Rating **	M	Issue No.	<b>4 (cont)</b>
LM End	<b>3.42</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP\_2017\_ST0010\_43\_4\_20170315\_00003.jpg



View of the erosion at the waterside toe.

LM Start	3.54	Rating **	M	Issue No.	5
LM End	3.93	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.156753 °	39.162113 °
				-121.733267 °	-121.730997 °
DWR ID	DWR_ST0010_02_s_2012_5				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Monitor is the erosion at the waterside toe.					

Photo 1 of 2 : SP\_2017\_ST0010\_43\_5\_20170315\_00004.jpg



View of the erosion along the waterside toe.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	3.54	Rating **	M	Issue No.	5 (cont)	
LM End	3.93	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			39.156753 °		39.162113 °
				-121.733267 °		-121.730997 °
DWR ID	DWR_ST0010_02_s_2012_5					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Monitor is the erosion at the waterside toe.						

Photo 2 of 2 : SP\_2017\_ST0010\_43\_5\_20170315\_00005.jpg



View of erosion at the waterside toe

LM Start	4.41	Rating **	M	Issue No.	9
LM End	4.43	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			39.168659 °	39.168937 °
				-121.728016 °	-121.727905 °
DWR ID	DWR_ST0010_02_s_2016_9				
Comment Code					
Inspector Comment					
2011 - Small erosion pocket. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: WAD_4-3_R]					

Photo 1 of 2 : SP\_2017\_ST0010\_43\_9\_20170315\_00010.jpg



View of the erosion along the waterside toe.

LM Start	<b>4.41</b>	Rating **	M	Issue No.	<b>9 (cont)</b>
LM End	<b>4.43</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP\_2017\_ST0010\_43\_9\_20170315\_00011.jpg



View of the erosion along the waterside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

### Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.60	04/11/2017 04/11/2017	Bob Duffey

LM Start	4.47	Rating **	M	Issue No.	7
LM End	4.49	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.169532 °	39.169800 °
				-121.727860 °	-121.727703 °
DWR ID	DWR_ST0010_02_s_2012_7				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Monitor the erosion along the waterside toe.					

Photo 1 of 2 : SP\_2017\_ST0010\_43\_7\_20170315\_00006.jpg



View of the erosion along the W/S toe.

LM Start	<b>4.47</b>	Rating **	M	Issue No.	<b>7 (cont)</b>
LM End	<b>4.49</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP\_2017\_ST0010\_43\_7\_20170315\_00007.jpg



View of the erosion along the waterside toe.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement